

Application No. 10/522503
Reply to Office Action of May 11, 2006

Docket No.: 12834-00004-US

AMENDMENTS TO THE CLAIMS

1. (Original) A process for the treatment of polyazole films, characterized in that a film is passed at least twice through a trough filled with a liquid, with the film being unrolled from a spool and rolled up on a further spool and the direction of travel of the film is changed during the treatment by altering the direction of rotation of the spools.
2. (Original) The process as claimed in claim 1, characterized in that the liquid in the trough is changed after the first treatment.
3. (Previously presented) The process as claimed in claim 1, characterized in that liquid adheres to the film after the first treatment.
4. (Original) The process as claimed in claim 3, characterized in that at least 1 g/m² of liquid adheres to the film.
5. (Previously presented) The process as claimed in claim 1, characterized in that the liquid comprises water.
6. (Currently amended) The process as claimed in claim 1, characterized in that the liquid comprises acid, ~~monomers containing vinylsulfonic acid and/or monomers containing vinylphosphonic acid groups.~~
7. (Original) The process as claimed in claim 6, characterized in that the acid is phosphoric acid and the monomer containing vinylsulfonic acid groups is vinylsulfonic acid and the monomer containing vinylphosphonic acid groups is vinylphosphonic acid.

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8. (Previously presented) The process as claimed in claim 1, characterized in that the film is passed through the bath of liquid at least 10 times.
9. (Previously presented) The process as claimed in claim 1, characterized in that the film is passed through the bath of liquid at a speed of from 0.5 to 100 m/min.
10. (Previously presented) The process as claimed in claim 1, characterized in that the film is conveyed with a drawback force per unit width of the film in the range from 0.5 to 200 N/m.
11. (Previously presented) The process as claimed in claim 1, characterized in that the film is treated for from 15 minutes to 3 hours.
12. (Previously presented) The process as claimed in claim 1, characterized in that a jigger is used for the treatment of polyazole films.
13. (Previously presented) The process as claimed in claim 2, characterized in that liquid adheres to the film after the first treatment.
14. (Previously presented) The process as claimed in claim 13, characterized in that at least 10 g/m^2 of liquid adheres to the film.
15. (Previously presented) The process as claimed in claim 14, characterized in that the liquid comprises water and from 25 to 75 ml/m^2 of water adhere to film.

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16. (Previously presented) The process as claimed in claim 15, characterized in that the liquid comprises acid, monomers containing vinylsulfonic acid and/or monomers containing vinylphosphonic acid groups.
17. (Previously presented) The process as claimed in claim 16, characterized in that the acid is phosphoric acid and the monomer containing vinylsulfonic acid groups is vinylsulfonic acid and the monomer containing vinylphosphonic acid groups is vinylphosphonic acid.
18. (Previously presented) The process as claimed in claim 17, characterized in that the film is passed through the bath of liquid at least 25 times at a speed of from 1.0 to 25 m/min.
19. (Previously presented) The process as claimed in claim 18, characterized in that the film is conveyed with a drawback force per unit width of the film in the range from 12 to 60 N/m and the film is treated for from 15 minutes to 3 hours.
20. (Previously presented) The process as claimed in claim 19, characterized in that a jigger is used for the treatment of polyazole films.
21. (New) A process for producing polymer conducting membranes which comprises passing a film at least twice through a trough filled with a liquid, with the film being unrolled from a spool and rolled up on a further spool and the direction of travel of the film is changed during the treatment by altering the direction of rotation of the spools and wherein the liquid comprises an acid to give the film the ability to conduct protons.
22. (New) The process as claimed in claim 1, wherein the acid is monomers containing vinylsulfonic acid and/or monomers containing vinylphosphonic acid groups.